Manufacturing of cryogenic engine

†5101. SHRMATIKUMKUMRAI: WU1 the PRIME MINISTER be pleased to state:

(a) whether country had succeeded in manufacturing cryogenic engine with the help of indigenous technology, associated with the space-programme; and

(b) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (SHRISATYABRATA MOOKHERJEE): (a) Yes, Sir.

(b) Under the indigenous Cryogenic Upper Stage (CUS) Project, ISRO has successfully designed and manufactured the cryogenic engine, which has been tested in the ground evaluation tests. The first flight demonstration of the engine as part of indigenous cryogenic upper stage in a development flight of GSLV is tentatively planned during 2004-05.

Communication Satellites

5102. SHRIRAJEEVSHUKLA: Will the PRIME MINISTER be pleased to state:

(a) the number of communication satellites launched by India during the last five years;

(b) the details of the cost, coverage and benefits involved therein; and

(c) the state of progress of research and development to produce indigenous rockets to lunch the satellites in future?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (SHRI SATYABRATA MOOKHERJEE) : (a) India has launched five communication satellites during the last five years.

(b) The information is given in the enclosed Statement *(See* below).

(c) India has developed the capability to launch indigenously built Remote Sensing Satellites into polar orbits and Geostationary Satellites weighing upto 1800 Kg. into Geostationary orbit through the Polar Satellite Launch Vehicle (PSLV) and Geostationary Satellite Launch Vehicle (GSLV) respectively.

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†Original notice of the question was received in Hindi.

Statement

Details of the cost, coverage and benefits involved in the communication satellites launched by India during the last five years

Satellite	Launch Year	Cost (Rs. in crores) (Satellite only, excluding launch)	Coverage	Benefits
(1)	(2)	(3)	(4)	(5)
INAT-2E	April, 1999	200	Wide & Zonal	Telecom, TV Services. Meteorological imaging.
INSAT-3B	March, 2000	150	India	VSAT services. Mobile Satellite Services.
GSAT-1	April, 2001	35	India	Communication. (Experimental payload)
INSAT-3C	January, 2002	250	India	Telecom, TV, VSAT services and Radio networking.
INSAT-3A	April, 2003	250	Wide & India	Telecom., TV services, Meteorological imaging, Data collection and Search & Rescue services.

Delay in implementing projects

5103. SHRIJANARDHANAPOOJARY: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact the Government have prepared a report indentifying the infrastructure projects costing over Rs. 100 crores that have not been implemented for years;